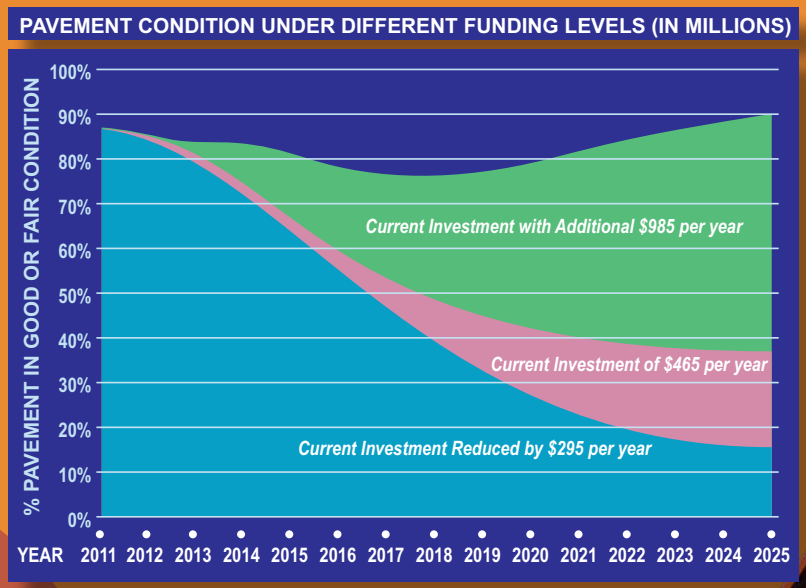
The Challenge

Limited funding restricts the number of roads in poor condition that can be rebuilt or repaired each year. With increased investment, pavement condition can be improved.

- ***The blue area represents forecasted pavement condition based on current state gasoline and vehicle registration revenues. With no additional investment, maintenance and repair costs will continue to outpace MDOT funding, driving pavement condition below 20 percent good or fair.***
- ***The pink area represents forecasted pavement condition based on enough state funding to match expected federal aid. However, with this investment level, pavement condition will still fall at an alarming rate.***
- ***The green area represents forecasted pavement condition based on increased investment. This would allow for more longer-term fixes, getting pavement condition up to 90 percent good or fair by 2025.***

In the coming years, MDOT has the challenge of balancing declining available funding with growing pavement needs. A long-term funding solution is critical because as pavements fall into poor condition they are much more expensive to replace.



MDOT prioritizes projects based on:

Safety
Road Condition
Traffic Volume
Public Input
Maintenance Costs

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Providing the highest quality integrated transportation services for economic benefit and improved quality of life.

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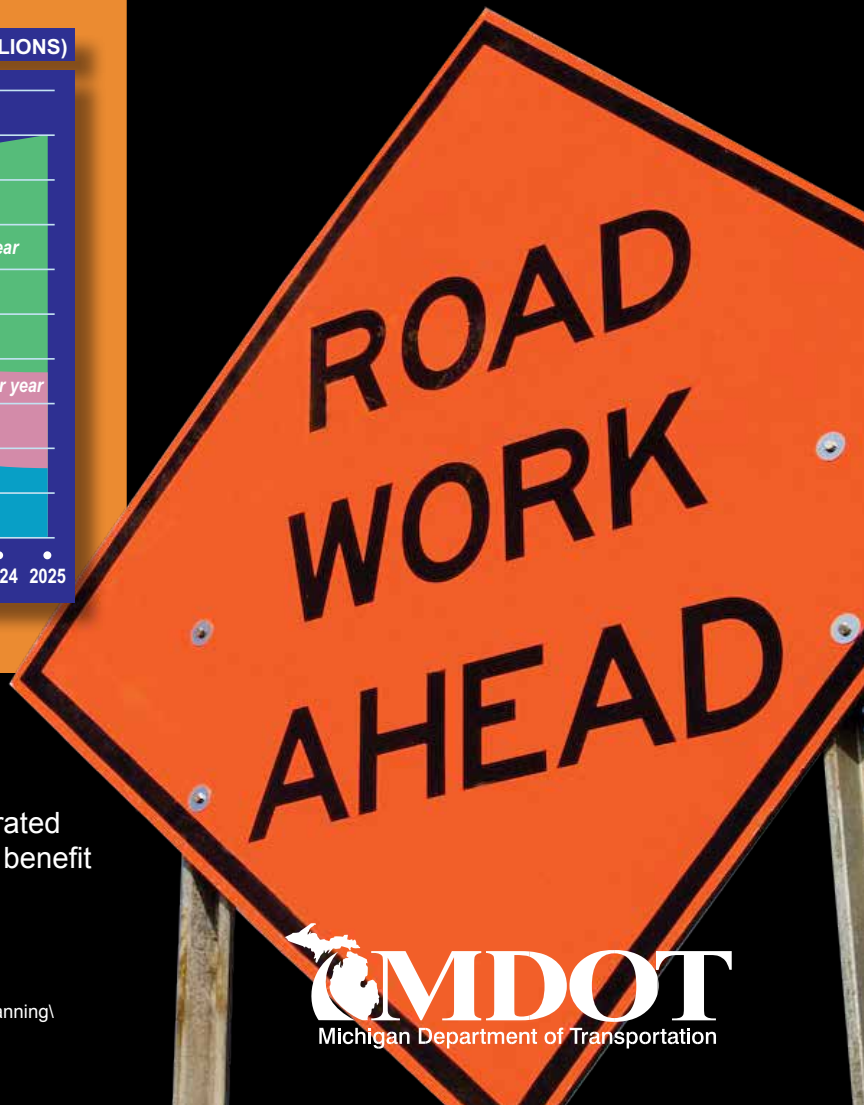
Prepared by: MDOT Graphic Design
Transportation Planning\Statewide Transportation Planning\
Which Roads.indd 9/13 ge

Which Roads to Fix?

How MDOT Decides



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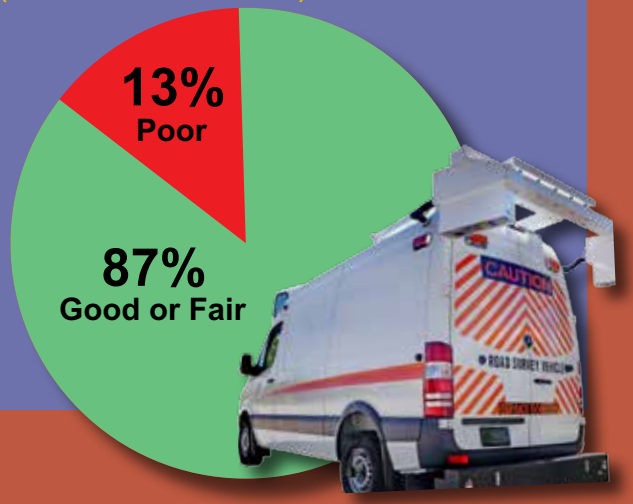
How does the Michigan Department of Transportation (MDOT) select which roads to fix?

Factors MDOT takes into account:

CURRENT PAVEMENT CONDITION OF MDOT ROADS

(I, US and M routes)



1. Current Condition

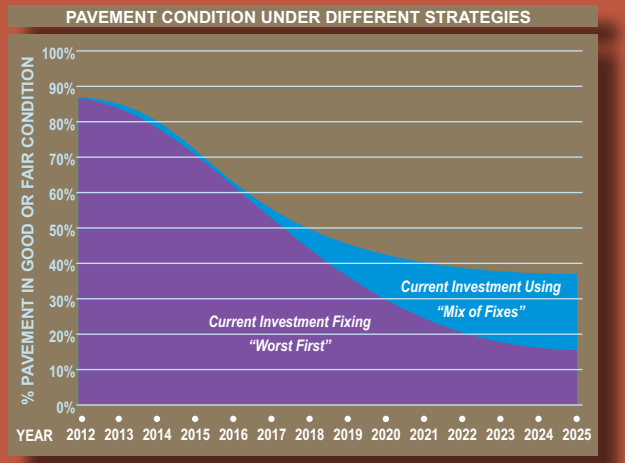
MDOT uses multiple techniques to determine a road's surface condition as good, fair or poor. This information also helps determine the number of years left until the road will need to be rebuilt.

- ***"Windshield" survey***
- ***Measure roughness***
- ***Identify crack types and severity***

2. Forecasted Condition

MDOT forecasts pavement conditions with the Road Quality Forecasting System (RQFS), which takes into account

- ***Current road condition***
- ***Projected pavement deterioration***
- ***How long a proposed fix will last***
- ***Types of fixes***



3. Strategy

MDOT monitors and manages the condition of the entire network, not just focusing on fixing the worst roads first. In order to maximize limited resources, MDOT uses a mix of fixes (reconstruction, resurfacing and preventive maintenance).

HISTORICAL AVERAGE ANNUAL INVESTMENTS FOR PAST SIX YEARS (IN MILLIONS)	
Reconstruction	**$187.5**
Resurfacing	**$187.5**
Preventive Maintenance	**$ 90.0**
Total Annual Budget	**$465.0**

Using this information, MDOT selects road construction projects that are the "right fix at the right time on the right road."

Reconstruction Fixes

- ***Repair the surface and base under the road***
- ***Lasts 14-26 years***
- ***Used for roads in poor condition***
- ***Most expensive***
  (about $1,375,000 per lane mile)

Resurfacing Fixes

- ***Repair or replace surface***
- ***Lasts 10-15 years***
- ***Used for roads in fair/poor condition***
- ***Mid-price***
  (about $500,000 per lane mile)

Preventive Maintenance Fixes

- ***Patch concrete or seal surface***
- ***Lasts 3-10 years***
- ***Used for roads in good condition***
- ***Least expensive***
  (about $62,500 per lane mile)

ROAD DETERIORATION